

Mobile Maintenance Equipment Systems (MMES)

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Repairs battle-damaged combat systems on site and up through the direct support level in the forward battle area.

DESCRIPTION

The Mobile Maintenance Equipment System (MMES) employs a system-of-systems approach to provide two-level maintenance capability to the warfighter. Five interconnected maintenance systems distributed throughout the Army at multiple levels and echelons provide a holistic repair capability in all environments.

Shop Equipment Contact Maintenance (SECM) is a first responder providing immediate field-level maintenance and repair to battle-damaged ground support and aviation equipment. The SECM has industrial quality tools, light duty cutting and welding equipment, and an on-board compressor and power inverter. The system consists of a fabricated

enclosure mounted on a M113/M1152 High Mobility Multi-Purpose Wheeled Vehicle (HMMWV).

Forward Repair System (FRS) is a high-mobility, forward maintenance and repair system. The FRS places industrial-grade power tools, diagnostic test equipment, 35 kW generator, and heavy lift capability in one package. The FRS is configured with a 5.5 ton lift capacity with a 14 foot radius crane capable of removing and replacing major components on all models of military vehicles. Mounted to a flat rack, it is transported by Palletized Load System (PLS) trucks in Heavy Brigades, or by the Heavy Expanded Mobility Tactical Truck Load Handling System (HEMTT-LHS) in the Stryker Brigade Combat Teams.

Standard Automotive Tool Set (SATS) provides the warfighter a common tool set with the capability to perform field-level maintenance at all levels of materiel system repairs. The SATS includes a Base Tool Set and Field Maintenance Modules (FMMs) that allow the system to be tailored to support heavy, medium, and light combat units. SATS is transported by International

Organization for Standardization 8x8x20 containers that can be mounted on a flat rack or a trailer. The system contains an electric power generator, Environmental Control Unit (ECU), Signal Entry Panel (SEP), ergonomic storage of a complete tool load of lifetime warranted industrial quality tools. SATS has communication capability that allows data and voice connections for Global Combat Support Systems–Army (GCSS-A). SATS is transported (towed) by a tactical cargo truck from the Family of Medium Tactical Trucks (FMTV).

Hydraulic System Test and Repair Unit (HSTRU MX3) is designed to perform diagnostic testing and repair of hydraulic systems. HSTRU is capable of transporting and assembling hoses, tubes and fitting components, and fabricating industry standard hoses with crimping technology. HSTRU is trailer mounted, integrated, and transportable in a standardized enclosure that is capable of rapid deployment.

Shop Equipment Welding (SEW) provides a full spectrum of welding capabilities, and supports two-level maintenance utilizing the only qualified Welders (44B)

in the Army. Repairs may be performed in all weather, climatic, and light conditions. The SEW integrates commercial off-the-shelf and NDI components in an enclosure mounted on an M103A3 Trailer.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **Current–1QFY10:** SEW production and fielding
- **Current:** SECM production and fielding
- **Current:** FRS production and fielding
- **Current:** SATS production and fielding
- **3QFY10:** SEW Reset program established

PROJECTED ACTIVITIES

Production and Fielding

- **1QFY11:** HSTRU first unit equipped
- **2QFY11:** FRS
- **Ongoing:** SECM
- **Ongoing:** SATS
- **Ongoing:** SEW Reset program continues

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Mobile Maintenance Equipment Systems (MMES)

FOREIGN MILITARY SALES

None

CONTRACTORS

FRS and SECM:

Rock Island Arsenal (Rock Island, IL)

Snap-on Industrial (Crystal Lake, IL)

SATS:

Kipper Tool Company (Gainesville, GA)

AAR Mobility Systems (Cadillac, MI)

MCT Industries, Inc. (Albuquerque, NM)

HSTRU:

Mandus Group (Rock Island, IL)

FRS
Forward
Repair System



SECM
Shop Equipment
Contact Maintenance

SEW
Shop Equipment
Welding



HSTRU
Hydraulic System
Test and Repair Unit



SATS
Standard Automotive
Tool Set

